Claims

1. A method for preventing or treating (i) acute or chronic graft rejection in a recipient of cell, tissue or organ allo- or xenotransplant, (ii) an inflammatory or autoimmune disease in a subject in need thereof, (iii) vein graft stenosis, restenosis and/or vascular occlusion following vascular injury or (iv) a malignant proliferative disease in a subject in need thereof, comprising a step of administering to the recipient a therapeutically effective amount of an inhibitor of a Vav protein.

2. Use of an inhibitor of a Vav protein for the preparation of a medicament for preventing, treating or inhibiting acute or chronic graft rejection in a recipient of cell, tissue or organ allotransplant, or for treating an inflammatory or autoimmune disease or a malignant proliferative disease.

3. A method or use according to claim 1 or claim 2, wherein the Vav protein is Vav-1.

4. A therapeutic combination comprising an inhibitor of a Vav protein and at least one second agent selected from an immunosuppressant, immunomodulatory or anti-inflammatory drug, or a chemotherapeutic agent.

5. A screening method for identifying an agent as an inhibitor of Vav1 or Vav2, comprising a step of determining the rate of guanine nucleotide exchange in a Rho or Rac GTPase in the presence of (a) the agent and (b) Vav1 or Vav2, or an active fragment or mutant thereof, wherein a decrease in the rate of guanine nucleotide exchange in the presence of the agent is indicative that the agent is an inhibitor of Vav1 or Vav2.

6. A screening method according to claim 5, comprising a step of measuring the rate of exchange of a fluorescently-labeled guanine nucleotide for an unlabelled guanine nucleotide in the GTPase in the presence of (a) the agent and (b) Vav1 or Vav2, or an active fragment or mutant thereof.

7. A screening method according to claim 6, wherein the method comprises
(i) incubating the GTPase with a fluorescent-labelled guanine nucleotide and
(ii) measuring fluorescence changes in the presence of
(a) the agent
(b) Vav1 or Vav2, or an active fragment or mutant thereof, and

(c) an unlabelled guanine nucleotide.

8. A screening method according to claim 6 or claim 7, which is suitable for high-throughput screening.

9. A Vav1 or Vav2 inhibitor obtainable by a screening method according to any of claims 6 to 8.

10. A pharmaceutical composition for use in a method as defined in claim 1 comprising an inhibitor of a Vav protein and one or more pharmaceutically acceptable diluents or carriers therefor.